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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,004	03/01/2002	Brian B. Martin	020489-000500US	6276

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EXAMINER

DAWSON, GLENN K

ART UNIT	PAPER NUMBER
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3731

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,004

Applicant(s)

MARTIN ET AL.

Examiner

Glenn K Dawson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27, 30-33, 36, 38-44 and 47-64 is/are rejected.
- 7) ☒ Claim(s) 28, 29, 34, 35, 37, 45 and 46 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.1.02, 3.14.03, 12.29.03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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Claim Objections

Claim 57 is objected to because of the following informalities: in claim 57, there is a second protuberance claimed without a first one having been claimed. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5,15-17,23-27,33,36 and 38-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Hart, et al.-6099553.

Hart discloses a suture cinch made out of shape memory nitinol which moves from a tensioned flat orientation to a relaxed folded configuration which causes suture threads held therein to go from a straight orientation to a more tortured orientation.

Claims 1-17,20,23,24 and 41-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Mariant, et al.-5639277.

Mariant discloses a vasoocclusive coil which has a tensioned orientation inside a delivery catheter in a flat, straight coiled shape and moves to a relaxed orientation having loops which separate from each other. Even though the use of the device with

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suture strands is not disclosed, the examiner contends that the structure disclosed therein could perform as claimed if the suture threads were threaded through coils of the device. If one so desired, the coil could be placed about the distal end of the delivery catheter.

Claims 1-9,14-17,19-24 and 41-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Schaefer, et al.-2002/0107534.

Schaefer discloses a vasoocclusive coil which has a tensioned orientation inside a delivery catheter in a flat, straight coiled shape and moves to a relaxed orientation having loops which separate from each other. Even though the use of the device with suture strands is not disclosed, the examiner contends that the structure disclosed therein could perform as claimed if the suture threads were threaded through coils of the device.

If one so desired, the coil could be placed about the distal end of the delivery catheter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 30-32 and 58-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hart, et al.-'553 in view of Gibson-6063106.

Hart discloses the invention as claimed with the exception of the use of a loading tool with the shape memory device and the instructions. It would have been obvious to have used a delivery device or loading tool to place the cinch in position relative to the suture strands, as it would hold the cinch better than the fingers of the surgeon.

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Gibson discloses a kit having a suture button and instructions for use. It would have been obvious to have provided a set of instructions with the kit of Hart to allow for the proper use of the device by the surgeon.

Claims 58 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaefer, et al.-'534 in view of Gibson-6063106.

Schaefer discloses the invention as claimed with the exception of the instructions. Gibson discloses a kit having a suture button and instructions for use. It would have been obvious to have provided a set of instructions with the kit of Schaefer to allow for the proper use of the device by the surgeon.

Claims 19,58 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mariant, et al.-'277 in view of Gibson-6063106.

Mariant discloses the invention as claimed with the exception of the interlocking of two elements and the instructions. However, it is known that in the treating of aneurysms, it is often necessary to place more than one coil into the aneurysm. The examiner considers it obvious that given the structure of the coil upon relaxing, that two coils would interlock when placed in a small enough location. Gibson discloses a kit having a suture button and instructions for use. It would have been obvious to have provided a set of instructions with the kit of Mariant to allow for the proper use of the device by the surgeon.

Claims 47-57 and 61-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moser, et al.-5725556 in view of Damarati-2003/0130669.

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Moser discloses a suture lock using a ratchet locking leaves which engage a suture having beads thereon at different spaced locations during use. However, the delivery catheter is not disclosed. Damarati discloses the use of a delivery catheter through an endoscope to introduce a suture anchor into the proper position in the patients' body. It would have been obvious to have used a catheter to deliver the suture lock of Moser into position in the event that the location of the surgical procedure required an endoscope.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schaefer, et al.-'534 or Mariant-, et al.-'277 in view of Engelson-5944733.

Both of these references disclose the invention as claimed with the exception of the coil being made out of ribbon in the claimed size range. Engelson discloses the manufacture of a vasoocclusive coil using a ribbon in the claimed parameters. It would have been obvious to have manufactured the coils of Schaefer, et al. or Mariant-, et al. With the size and shape wire of Engelson as this has been shown to be an effective alternative shape wire to use for treating aneurysms.

Allowable Subject Matter

Claims 28,29,34,35,37,45 and 46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn K Dawson whose telephone number is 703-308-4304. The examiner can normally be reached on M-Th 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on 703-308-2154. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Glenn K Dawson
Primary Examiner
Art Unit 3731

Gkd
29 November 2004